



January 7, 1999

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WASTE MGMT. DIVISION

Mr. Robert Haslam
Assistant Hazardous Materials Specialist
Sites Management Section
Vermont Department of Environmental Conservation
103 South Main Street
Waterbury, VT 05676

RE: Parker's Service Station, Middletown Springs (Site # 91-1170) - Parker's Well
Water Quality and SMAC Request

Dear Mr. Haslam:

While reviewing project files for 1999 scheduling, I found the March 16, 1998 water quality laboratory report for a water sample collected on March 4, 1998 from the Parker's well. Apparently the results were not reported to you earlier. I apologize for this oversight and am reporting them now and formally requesting a Site Management Activity Completed (SMAC) designation for the Parker's Service Station site.

Lincoln Applied Geology, Inc. (LAG) collected a water sample from the Parker's well at the bathroom sink tap location on March 4, 1998. The laboratory report is included as **Appendix A**, and the historical water quality results and trends are summarized in **Table 1** and shown in **Charts 1** (BTEX) and **2** (MTBE). The March 4, 1998 water quality results indicate that there were no BTEX and MTBE contaminants detected, which is the same as the March and December 1997 analytical results. The "non-potable water" sign above the Parker's bathroom sink currently remains in place. Based on the cumulative historical monitoring results we continue to believe that this site poses little to no risk from any low levels of residual subsurface contamination.

As stated in your April 18, 1996 letter, annual monitoring of the Parker's well will continue until the site qualifies for a SMAC designation. Review of the historical data associated with this site indicates that a SMAC designation is warranted since:

1. the source has been adequately defined as it relates to the ground water contamination;
2. the majority of the subsurface contamination appears to have been naturally remediated through volatilization, dilution, and biodegradation, and natural attenuation;
3. BTEX and MTBE ground water concentrations in the Parker's well have

Mr. Robert Haslam
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been non-detect since March 19, 1997. Low BTEX and MTBE levels in monitor wells MW-3 and MW-4 near the southeast corner of the property had declined from their peak levels in 1994 when their sampling ceased after March 6, 1996;

4. ground water quality enforcement standards for BTEX and MTBE are probably not exceeded at the site boundary line. Water quality samples collected from 6 nearby water supply wells since June 16, 1993 have never shown the presence of BTEX and MTBE contaminants; and
5. no unacceptable threat to human health or the environment exists.

Please refer to the historical summary of ground water quality data included as **Table 1**. When the site is granted a SMAC designation, we will properly abandon ground water monitor wells MW-1, 2, 3, and 4. At your request, LAG will prepare a cost estimate to perform the well abandonment.

If you have any questions or comments regarding this letter and our request for a SMAC, please call me at 453-4384.

Sincerely,
Lincoln Applied Geology, Inc.



William D. Norland
Hydrogeologist

WDN/wdn

Enclosures

cc: Norman Parker

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Lincoln Applied Geology, Inc.
Environmental Consultants

163 Revell Road • Lincoln, Vermont 05443 • (802) 453-4384 • FAX (802) 453-5399

Project: Parker's Service Station
Location: Middletown Springs, Vermont

Ground Water Quality Results (ppb)

Data Point	Compound	1-13-92	2-5-93	6-16-93	9-22-93	12-22-93	3-23-94	6-7-94	10-3-94	12-28-94	3-29-95	9-20-95	3-6-96	3-19-97	12-16-97	3-4-98
MW-1	MTBE			164	<10	<1		<1	<1	<5	<5	<5	<5			
	BTEX			<4	<4	<6		<6	<6	<6	<6	8.9	<6			
MW-2	MTBE			135	<10	<1	1	2	<1	<5	<5	<5	<5			
	BTEX			<4	<4	<6	<6	<6	<6	<6	<6	<6	<6			
MW-3	MTBE			60.2	51.5	26	13	36	62	39	10	36	22			
	BTEX			10.2	<4	18	14	9	41	34	10	22.4	19.4			
MW-4	MTBE			42.2	26.9	74	55	21	55	32	30	<5	18			
	BTEX			<4	<4	34	42	6	33	26	26	7.5	25			
TW-1	MTBE										<5		<5			
	BTEX										<6		<6			
Parker Well	MTBE	89	99	19.3	<10	8	<20	9	16	5	<5	<5	22	<5	<5	<5
	BTEX	283.3	600.8	95.6	56.4	40	1700	<6	423	11	83	123.2	19.5	<6	<6	<6
Teer Well	MTBE	<1	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<5			
	BTEX	<9	<7.8	<4	<4	<6	<6	<6	<6	<6	<6	<6	<6			
US Post Office Well	MTBE	<1	<5	<5	<10	<1	<1	<1	<1	<5	<5	<5	<5			
	BTEX	<9	<4	<4	<4	<6	<6	<6	<6	<6	<6	<6	<6			
Vagin Well	MTBE	<1		<5												
	BTEX	<9		<4												
Conrad Well	MTBE							<1	<1	<5	<5	<5	<5			
	BTEX							<6	<6	<6	<6	<6	<6			
Rouse Well	MTBE	<1		<5												
	BTEX	<9		<4												
Faller Well	MTBE				<10	<1	<1	<1	<1	<5	<5	<5	<5			
	BTEX				<4	<6	<6	<6	<6	<6	<6	<6	<6			
NB-up	MTBE			<5					<1	<5	<5	<5	<5			
	BTEX			<4					<6	<6	<6	<6	<6			
NB-at	MTBE			<5						<5	<5	<5	<5			
	BTEX			<4						<6	<6	<6	<6			
Spring	MTBE			<5												
	BTEX			<4												
PR	MTBE			<5												
	BTEX			<4												

NOTES:
< - Contaminant not detected at specified detection limit
Dark grey cell = DRY

Appendix A

Parker's Well
Laboratory Report
for
March 4, 1998

GREEN MOUNTAIN LABORATORIES, INC.

RR 3, BOX 5210
Montpelier, Vermont 05602

Phone (802) 223 - 1468

Fax (802) 223 - 8688

LABORATORY RESULTS

CLIENT NAME:	Lincoln Applied Geology	REFERENCE NO:	3454
ADDRESS:	RD 1 Box 710	PROJECT NO:	NA
	Bristol, VT 05443	DATE OF SAMPLE:	03/04/98
SAMPLE LOCATION:	Parkers Garage	DATE OF RECEIPT:	03/05/98
SAMPLER:	Jake Peirce	DATE OF ANALYSIS:	03/15/98
ATTENTION:	Bill Norland	DATE OF REPORT:	03/16/98

Pertaining to the analyses of specimens submitted under the accompanying chain of custody form, please note the following:

- The Trip Blank was prepared by the client with reagent grade water supplied by the laboratory.
- Water samples submitted for VOC analysis were preserved with HCl.
- Specimens were processed and examined according to the procedures outlined in the specified method.
- Holding times were honored.
- Instruments were appropriately tuned and calibrations were checked with the frequencies required in the specified method.
- Blank contamination was not observed at levels interfering with the analytical results.
- Continuing Calibration standards were monitored at intervals indicated in the specified method. The resulting analytical precision and accuracy were determined to be within method QA/QC acceptance limits.
- The efficiency of analyte recovery for individual samples was monitored by the addition of surrogate analyte to all samples, standards, and blanks. Surrogate recoveries were found to be within laboratory QA/QC acceptance limits, unless noted otherwise.

Reviewed by:



Raul Sanchez
Chemical Services

MAR 16 1998

GREEN MOUNTAIN LABORATORIES, INC.

Montpelier, Vermont 05602

Phone (802) 223 - 1468

Fax (802) 223 - 8688

LABORATORY RESULTS

GC/MS METHOD - BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES) + MTBE

GML REF. # : 3454
STATION: TRIP BLANK
ANALYSIS DATE: 03/15/98
DATE SAMPLED: 03/04/98
SAMPLE TYPE: WATER

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	3	ND
MTBE	5	ND

Surrogate % Recovery: 81.6 %

ND = Not Detected

BPQL = Below Practical Quantitation Limits

QAR 1 6 1998

GREEN MOUNTAIN LABORATORIES, INC.

Montpelier, Vermont 05602

Phone (802) 223 - 1468

Fax (802) 223 - 8688

LABORATORY RESULTS

GC/MS METHOD - BTEX (BENZENE, TOLUENE, ETHYLBENZENE, XYLENES) + MTBE

GML REF. #: 3454
STATION: BATHROOM SINK TAP
ANALYSIS DATE: 03/15/98
DATE SAMPLED: 03/04/98
SAMPLE TYPE: WATER

PARAMETER	PQL (µg/L)	Conc. (µg/L)
Benzene	1	ND
Toluene	1	ND
Ethylbenzene	1	ND
Xylenes	3	ND
MTBE	5	ND

Surrogate % Recovery: 82.3 %

ND = Not Detected

BPQL = Below Practical Quantitation Limits

APR 16 1998

APR 16 1998

G M L S A M P L E

E-mail: GML@together.net

Sampler	Jake Petzel
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Sample	Date	Time	# of Cont.	Pres.	Sample Type
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2000	3/4	800	2	4C	420
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11/10	3/10	12:00	2	131	14.0
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BEAVERCREEK JUNE 1983	3/1/83	11	11
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	

Age Group	Percentage
18-24	65
25-34	70
35-44	75
45-54	80
55-64	85
65+	95

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Age Group	No answer	No	Yes	Probably yes	Probably no
18-24	45%	35%	10%	5%	5%
25-34	40%	30%	15%	10%	5%
35-44	35%	25%	20%	15%	5%
45-54	30%	20%	25%	20%	5%
55-64	25%	15%	30%	25%	5%

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Chain of Custody

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Received By	Date / Time:
Received By	Date / Time:

Quished By:	Date / Time:	Account No.
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Temperature: _____
Vial Lot ID #: _____

John Jones

Plot Temperature:	
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Vial Lot ID #:

Accepted By:

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